REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-4 have been rejected under 35 U.S.C. §112, second paragraph, as being vague and indefinite; Claim 1 has been rejected under 35 U.S.C. §102 as being anticipated by Yea and Claims 2-4 have been rejected under 35 U.S.C. §103 as being unpatentable over Yea. New Claims 5-7 have been added and thus, Claims 1-7 remain active.

Considering first then the rejection of Claims 1-4 under 35 U.S.C. §112, second paragraph, as being vague and indefinite, it is to be noted that appropriate corrections have been made to the claims so as to consistently make reference to the Reynolds number. Insofar as the term Reynolds number is a widely known and accepted term in aeronautical engineering, it is submitted that one of ordinary skill in the art would understand the use of this term. Accordingly, it is submitted that this amendment to the claims and to the specification complies with 35 U.S.C. §112, second paragraph.

Considering next then the rejection of Claim 1 under 35 U.S.C. §102 as being unpatentable over Yea, it is to be noted that Claim 1 is now amended to specify that the blade is formed in an outer surface thereof with a bent plate having a streamline shape and has a notch portion formed therein along a predetermined length between a front edge and a rear edge of the blade. To the contrary, the disclosure of Yea illustrates substantially solid fan blades 22 as shown in Figures 2A and 2C thereof and thus clearly does not teach a blade formed at an outer periphery thereof by a bent plate which has a streamline shape. To the contrary, the blade 22 is required to be substantially solid so as to permit the formation of the plurality of notches 7 illustrated in such figures and described in detail in column 4, lines 23-66. Insofar as any attempt to modify the structure of the blade of Yea would destroy such

blade for its intended purpose of providing a plurality of V notches in an undersurface of the blade, it is submitted that Claim 1 patentably defines over Yea.

Insofar as the above-described features provide numerous advantages as described in detail in the present application, it is submitted that such are novel and are not shown by Yea or any of the remaining references of record. More particularly, the present invention is advantageous, for example, in that the blade is rotated by air resistance or by a lift component force of the wind and therefore, the blade, namely as a windmill, can be rotated with excellent power generation efficiency, particularly even at a low wind speed region when starting or when a weak wind occurs (cf. page 11, lines 6-22 and at page 8, line 24 through page 9, line 14).

Applicant further notes that any attempt to modify a plurality of notches 7 of Yea with one continuous notch as provided in the present invention would not be obvious to one of ordinary skill in the art and, to the contrary, would be opposite the teaching of Yea which, more particularly, states at column 4, lines 55-66 that:

> It can be seen from the figure that the V notch (7) in the fan blade (22) only occupies an appropriate portion and the notch (7) does not extend to the overall length of the fan blade (22). The reason behind this is that the Inventor has found, through experimentation, that it is easier to discharge the air through the top plate (12) of the outer tower (1) when the upper trend of the air flow is relieved. It is, therefore, unnecessary to guide the air flow at the discharge.

Next considering then the rejection of Claims 2-4 under 35 U.S.C. §103 as being unpatentable over Yea, it is submitted that based upon the above-noted comments in support of Claim 1, Claims 2-4 also merit indication of allowability. Furthermore, while the Examiner stated that it would be obvious to modify Yea to meet the limitations set forth in such claims, it must be recalled that when obviousness is based upon the modification of a single reference, there must be some suggestion or motivation to modify the teaching of that

reference.[1] In addition, a prior art reference must be considered as a whole, including those portions which might lead away or teach away from the invention of the patent.[2] It can thus be appreciated that since there is no motivation nor teaching or suggestion of modifying teachings of Yea to meets the Reynolds number claimed the lift coefficient claimed and the notch portion formed from a position of 75% through 45% of the chord as claimed, it is submitted that Yea does not render Claims 2-4 obvious. Moreover, in view of the fact that Yea teaches away from having the notch portion from a position of 35% through 45% of the cord from a front edge thereof over a rear edge thereof since any such modification would destroy Yea for its intended function. It is therefore submitted that each of Claims 2-4 also merit indication of allowability. Applicant further submits that new Claims 5-7 contain limitations not shown in Yea or any of the remaining references of record. It is therefore requested that each of Claims 5-7 also be indicated as being allowable.

Applicant further notes that the wind power machine disclosed in Yea is directed to a vertical shaft type wind machine combining a Gyro-Mill type wind machine with a Cross Flow type windmill machine wherein a fixed outer tower is used as the Gyro-Mill type wind machine and adjustable flow guiding plates are utilized, while a rotating inner tower is used in a Cross Flow type wind machine. Such wind power machine can be used for a wind power generator and as a cooling fan. It is further noted that these wind power machines employ conventional blades contrary to the present invention which employs a Gyro-Mill type blade having the notch structure emphasized hereinabove, which thus improves the performance of the windmill, particularly in a low wind speed region. For the Examiner's information, attached herewith is Attachment A which includes Figures 1, 1-1, Graph 1-3 an illustration of various types of windmills. In addition, a copy of the blueprint of the windmill in accordance with the present invention is included in Attachment A.

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[1] *B.F. Goodrich Company v. Aircraft Braking Systems Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314 (Fed. Cir. 1996).
[2] *Panduit Corp. v. Dennison Manufacturing Company*, 810 F.2d 1561, 1568, 1 USPQ2d 1593 (Fed. Cir. 1987).

In view of the foregoing, an early and favorable Office Action is believed to be in order and the same is hereby respectfully requested.

Respectfully submitted,

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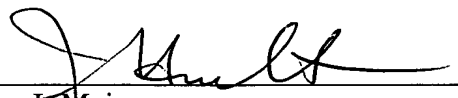

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